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10/536,476	05/23/2005	Roy J Rosser	5640-1-2US/{28,642-A-USA	5175

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EXAMINER	
GODBOLD, DOUGLAS	
ART UNIT	PAPER NUMBER
2626	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/536,476	ROSSER ET AL.	
	Examiner	Art Unit	
	DOUGLAS C. GODBOLD	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 July 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to correspondence filed July 17, 2008 in reference to application 10/536,476. Claims 1-21 are pending and have been examined.

Response to Amendment

2. The amendment filed July 17, 2008 has been accepted and considered in this office action. Claim 21 has been added, and claim 15 cancelled.

Response to Arguments

3. Applicant's arguments with respect to claims 1, 6, 7, 8, 10, 11, 16-18, and 20 have been considered but are moot in view of the new ground(s) of rejection.

4. Applicant has argued that the prior art does not disclose the limitation of a context database (Remarks page 8). Applicant contends that Karaali's context database is not equivalent to those in the claims. However, upon further consideration the examiner has discovered that the primary reference of the previous rejections, Strubbe, in fact teaches these limitations. Strubbe, although not explicitly calling it "context," teaches using context elements to determine a response, by determining the mood, environment, and previous replies by the users to determine the reply from the user (Column 24 line 59-63.) Columns 20 line 56 – column 24 line 51 describes how contexts are collected and processed. Therefore the prior art of record teaches the

limitations of a context database, as contexts are recognized and therefore must be stored.

5. Applicant has argued that the prior art does not disclose the limitations of a using a context element to select a response (Remarks page 9). Applicant contends that Kay does not cover these limitations as mapped in the previous rejection. However, upon further consideration the examiner has discovered that the primary reference of the previous rejections, Strubbe, in fact teaches these limitations. Strubbe teaches using at least one context element to select a response (Column 24 line 59-63 explicitly states response is selected based on previous replies, mood data, etc.)

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 2, 6-8, 10-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Strubbe et al. (US Patent 6,721,706).

8. Consider claim 1, Strubbe discloses an autonomous response method (abstract, interaction simulator), comprising:

autonomously updating a statement-response database (see Col. 20, lines 45-55, where Strubbe discusses the response data is stored in the data store, therefore updating it); and

autonomously generating a natural language response to a received natural language input (Column 24 line 59-63 and Col. 20, lines 40-55, where Strubbe discusses the response data is generated), wherein said generating a response comprises following a conversation strategy (see Col. 19, lines 20-30, where Strubbe discusses the operation of the conversation simulator and describes the strategy), choosing at least one context element from a context database (see Col. 19, lines 40-50, where Strubbe discusses determining meaning from context. Columns 20 line 56 – column 24 line 51 describes how contexts are collected and processed. Specifically, column 21, events are recognized and classified. In order for this to function, context information such as events that can be recognized must be stored) and searching said updated statement-response database using said at least one context element to select a response (Column 24 line 59-63 explicitly states response is selected from a response data store based on previous replies, mood data, etc.).

9. Consider claim 2, Strubbe teaches the method of claim 1 in which said autonomously updating comprises:

autonomously downloading publication content that matches at least one search criteria from an online publication formatted to be in human readable form (column 25 lines 6-17 downloads information regarding Pokeman from an Internet site.);

converting said downloaded publication content into at least one entry suitable for use in said statement-response database (information such as character names is extracted; column 25 line 14-15); and

storing said at least one entry in said statement-response database (names added to profile data is data store; column 25 line 17.).

10. Consider claims 6 Strubbe discloses generating a response to a natural language query further comprises:

receiving said query as an electronic character stream (see Col. 20, lies 15-35, where Strubbe discuses user input);

parsing said query into a statement (see Col. 20, lines 25-35, where Strubbe discusses a parser); generating a plurality of candidate responses appropriate to said statement by searching said statement-response database (see Col. 20, lines 20-25, where Strubbe discusses a response generator, and Col. 20, lines 34-40, where Strubbe discusses selecting appropriate data from the data store, therefore searching the database) ;

choosing a best response from said candidate responses using said conversation strategy and said at least one context element taken from said context

database (see Col. 20, lines 24- 40, where Strubbe discusses gathering intelligence about the conversation and Col. 19, lines 20-30, where Strubbe discusses the strategy);

outputting said best response as an electronic character stream (see Col. 26, lines 10-18, where Strubbe discusses outputting to a display device, therefore using an electronic character stream).

11. Consider claim 7 Strubbe discloses generating a response to a natural language query further comprises:

receiving an input audio signal corresponding to a human voice representation of said query; converting said input audio signal into a query represented by an electronic character stream (see Col. 20, lines 15-25, where Strubbe discusses text derived from speech, therefore receiving and converting);

parsing said query into a statement (see Col. 20, lines 25-35, where Strubbe discusses a parser);

generating a plurality of candidate responses appropriate to said statement by searching said statement-response database; choosing a best response from said candidate responses using said conversation strategy and said at least one context element taken from said context database (see Col. 20, lines 34-40, where Strubbe discusses selecting appropriate data from the data store, therefore generating and choosing);

generating an electronic character stream representing a natural language version of said best response (see Col. 25, lines 60-68 where Strubbe discusses a template text); and,

converting said electronic character stream into a synthetic speech signal corresponding to an audible version of said best response (see Col. 25, lines 60-68, where Strubbe discusses a text-to-speech conversion).

12. Consider claim 8, Strubbe discloses the context database includes an event result (see Col. 22, lines 36-50).

13. Consider claim 10 Strubbe discloses the conversation strategy comprises: scoring said query by assessing the level of language use in said query input to provide a metric of query sophistication (see Col. 17, lines 52-68);

generating at least two candidate responses appropriate to said query (see Col. 20, lines 34-40);

scoring said at least two candidate responses by assessing the level of language use in said candidate responses to provide a metric of response sophistication for each candidate response (see Col. 20, lines 34-40);

choosing said candidate response having said metric of repose sophistication that most closely matches said metric of query sophistication (see Col. 17).

14. Claim 11 is directed towards an apparatus (which is taught by Strubbe abstract) requiring similar limitations as claim 1 and is therefore rejected for similar reasons.

15. Claim 12 requires similar limitations as claim 2 and is therefore rejected for similar reasons.

16. Claim 16 requires similar limitations as claim 6 and is therefore rejected for similar reasons.

17. Claim 17 requires similar limitations as claim 7 and is therefore rejected for similar reasons.

18. Claim 18 requires similar limitations as claim 8 and is therefore rejected for similar reasons.

19. Claim 20 requires similar limitations as claim 10 and is therefore rejected for similar reasons.

Claim Rejections - 35 USC § 103

20. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

21. Claims 3 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strubbe in view of Dagtas (US Patent 6,973,256).

22. Consider claim 3, Strubbe disclose autonomously acquiring information, wherein said information matches at least one search criteria; transforming said information into at least one entry suitable for use in said statement-response database; and, storing said at least one entry in said statement-response database (see Col. 20, lines 45-55, where Strubbe discusses the response data is stored in the data store, therefore updating it).

Strubbe does not specifically disclose acquiring an information stream from an audio-visual program, however Dagtas discloses acquiring an information stream from an audio-visual program (see Col. 6, lines 26-44, where Dagtas discusses detecting spoken words in the audio track of a video program).

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Strubbe, and use acquiring an information stream from an audio-visual program as taught by Dagtas, thus allowing the detection of interesting events in a video program, as discussed by Dagtas (see Col. 1, lines 60-68).

23. Claim 13 requires similar limitations as claim 3 and is therefore rejected for similar reasons.

24. Claims 4, 5, 14, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strubbe in view of Gusler (US Patent 7,058,565).

25. Consider claim 4, Strubbe discloses the statement-response database includes at least one list of response entries appropriate to a statement (see CoL 24, lines 52-63, where Strubbe discusses the response generator selects a response).

Strubbe does not specifically disclose a ranked-list, however Gusler discloses a ranked-list (see Col. 6, lines 55-65, where Gusler discusses ranking search results and listing according to the ranking).

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Strubbe, and use a ranked-list as taught by Gusler, thus utilizing key words in speech to improve customer service, as discussed by Gusler (see Col. 1, lines 45-50).

26. Consider claim 5, Strubbe discloses the statement-response database includes at least one list of response entries related to prior conversations with a specific user (see Col 14, lines 1-10, where Strubbe discusses previous conversation).

Strubbe do not specifically disclose a ranked-list, however Gusler discloses a ranked-list (see Col. 6, lines 55-65, where Gusler discusses ranking search results and listing according to the ranking).

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Strubbe, and use a ranked-list as taught by Gusler, thus

utilizing key words in speech to improve customer service, as discussed by Gusler (see Col. 1, lines 45-50).

27. Claim 14 requires similar limitations as claim 4 and is therefore rejected for similar reasons.

28. Consider claim 21, Strubbe teaches an autonomous response method (abstract), comprising:

autonomously updating a context database, said context database containing one or more context elements each related to an external real world element (see Col. 19, lines 40-50, where Strubbe discusses determining meaning from context. Columns 20 line 56 – column 24 line 51 describes how contexts are collected and processed. Specifically, column 21, events are recognized and classified. In order for this to function, context information such as events that can be recognized must be stored. Collumn 24 line 64- column 25 line 17, information is obtained such as Pokeman characters, which is context information for a response. Therefore this is updating a context database as it is stored.);

autonomously updating a statement-response database, said updating including selecting at least one of said context elements (see Col. 20, lines 45-55, where Strubbe discusses the response data is stored in the data store, therefore updating it); and

autonomously generating a natural language response to a received natural language input (Column 24 line 59-63 and Col. 20, lines 40-55, where Strubbe

discusses the response data is generated), wherein said generating a response comprises choosing at least one context element from said context database and searching said updated statement-response database, and using said at least one context element to select a response from said list of possible responses (Column 24 line 59-63 explicitly states response is selected from a response data store based on previous replies, mood data, etc. This is from most appropriate template which must be stored in a database, column 26 line 22.).

Strubbe does not specifically teach:

using said selected context element to form an optimism index and associating a possible response with said optimism index.

obtaining a list of possible responses ranked by said optimism indicia

and using said at least one context element as part of a current optimism index to select a response from said ranked list of possible responses

However Gusler discloses a using a ranked-list (see Col. 6, lines 55-65, where Gusler discusses ranking search results and listing according to the ranking).

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Strubbe, and use a ranked-list as taught by Gusler, thus utilizing key words in speech to improve customer service, as discussed by Gusler (see Col. 1, lines 45-50).

This combination now suggests using said selected context element to form an optimism index and associating a possible response with said optimism index (Strubbe, Column 24 line 59-63 explicitly states response is selected from a response data store

based on previous replies, mood data, etc. As the MOST appropriate response is selected, there must be some kind of ranking based on the context.).

obtaining a list of possible responses ranked by said optimism indicia (see Col. 6, lines 55-65, where Gusler discusses ranking search results and listing according to the ranking)

and using said at least one context element as part of a current optimism index to select a response from said ranked list of possible responses (see Col. 6, lines 55-65, where Gusler discusses ranking search results and listing according to the ranking. Also Strubbe, Column 24 line 59-63 explicitly states response is selected from a response data store based on previous replies, mood data, etc. wherein previous replies, mood data, etc is context).

29. Claims 9 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strubbe in view of Takebayashi (US Patent 6,357,596).

30. Consider claims 9, Strubbe discloses the conversation strategy comprises:

negotiating an identity of a current enquirer (see Col. 13, lines 20-30);

negotiating a meaning of a current query (see Col. 20, lines 25-35); and,

negotiating a conclusion to a current conversation.

Strubbe does not specifically disclose a conclusion, however Takebayashi discloses a conclusion (see Col. 29, lines 43-48, where Takebayashi discusses the end of the dialogue).

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Strubbe, and use a conclusion as taught by Takebayashi, thus providing a system capable of natural and smooth dialogue, as discussed by Takebayashi (see Col. 3, lines 15-20).

31. Claim 19 requires similar limitations as claim 9 and is therefore rejected for similar reasons.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOUGLAS C. GODBOLD whose telephone number is (571)270-1451. The examiner can normally be reached on Monday-Thursday 7:00am-4:30pm Friday 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DCG

/Patrick N. Edouard/
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